

DVT

Definition

A condition where there is a blood clot in a deep vein.

(a vein that accompanies an artery).

Causes, Incidence, and Risk Factors

- DVT's affects mainly the veins in the lower leg and the thigh.
- It involves the formation of a thrombus in the larger veins of the area.
- This thrombus may interfere with circulation of the area, and it may break off and travel through the blood stream (embolise).
- The embolus thus created can lodge in the brain, lungs, heart, or other area, causing severe damage to that organ.

- DVT's occurs in approximately 2 out of 1,000 people.
- The condition is most commonly seen in adults over age 60.
- 30% of all surgical patients
- 65% of below knee DVT's are asymptomatic

Risk Factors

- Risks include
 - prolonged sitting
 - bed rest, or immobilisation
 - recent surgery or trauma, especially hip surgery
 - gynecological surgery, heart surgery, or fractures
 - childbirth within the last 6 months
 - obesity
 - The Pill
 - History of previous clots
 - Long haul flights (economy class syndrome)

Signs & Tests

- Examination may reveal a red, swollen, tender area of the leg.
- The Homans sign is positive--there is sharp pain when the foot is flexed upward (dorsiflexion)

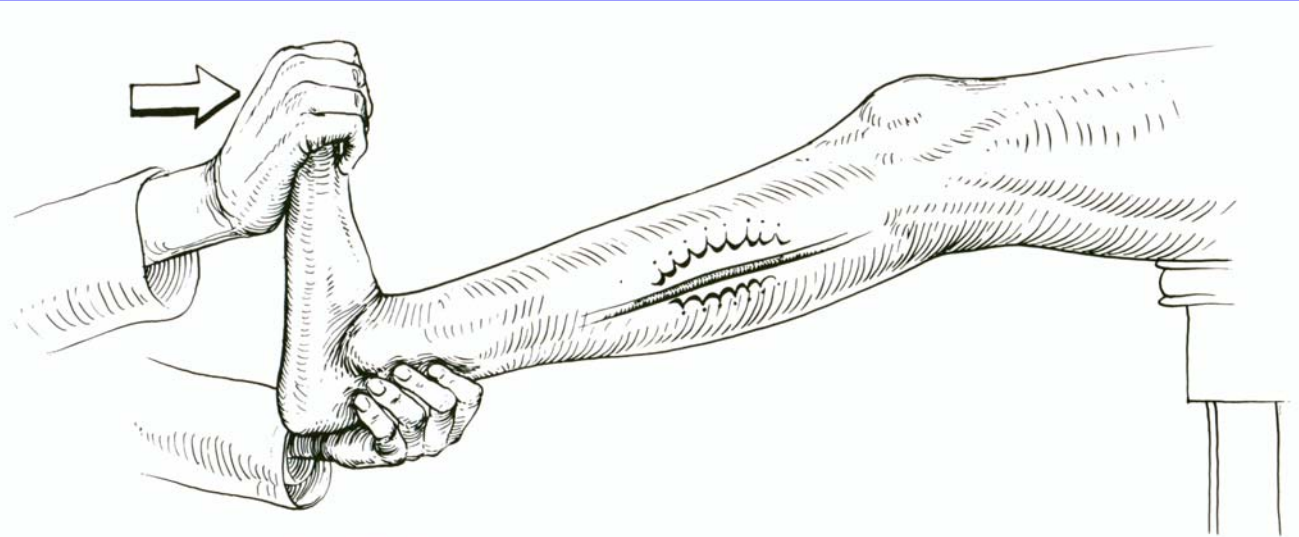


Fig. 99. Homans' Sign for deep vein thrombophlebitis.

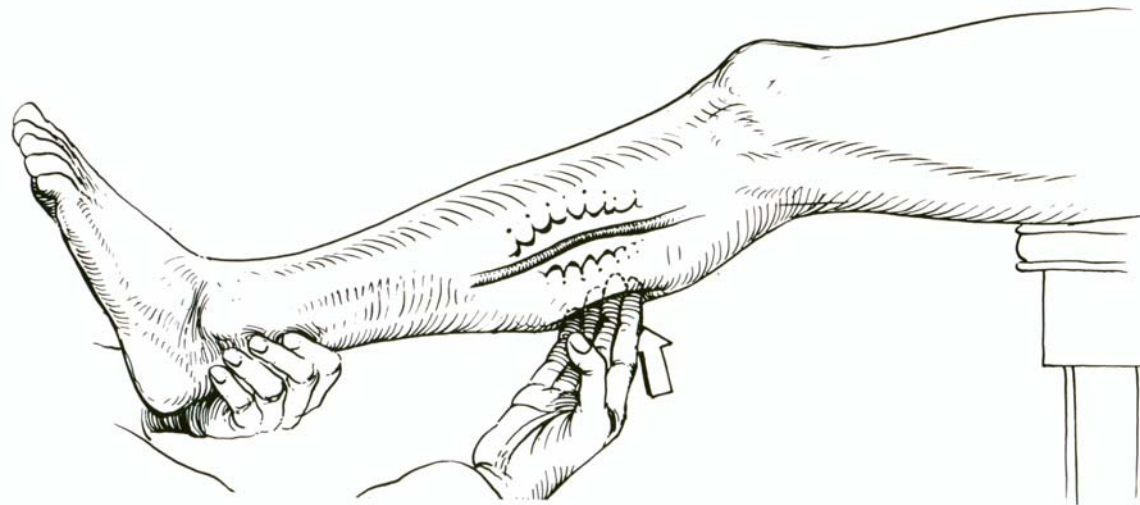


Fig. 100. Tenderness elicited by deep palpation of the calf muscle indicates deep vein thrombophlebitis.

The presence of deep venous thrombosis
may be seen on:

- venography of the legs
- extremity arteriography
- blood flow studies
- Doppler ultrasound exam of an extremity
- plethysmography of the legs

Symptoms

- leg pain in one leg only
- leg tenderness in one leg only
- swelling of only one leg
- increased warmth of one leg
- changes in skin colour of one leg, redness
- skin discoloration, bluish
- joint pain

Treatment

- The clot itself usually will resolve through the natural healing processes.
- Treatment is also aimed at relieving symptoms and preventing the clot from travelling to the lungs, heart, brain, or other areas.
- Anticoagulants (such as heparin or warfarin) or antiplatelet medications (such as aspirin) are prescribed to prevent further clotting.
- Analgesics may be needed to control pain.
- Thrombolytics (clot dissolving medications) are rarely needed.
- Bed rest with elevated leg.
- Oral anticoagulants or antiplatelet medications for a prolonged period of time.

Prognosis

- Most DVT's disappear without difficulty.
- Complications may be life threatening.

Complications

- pulmonary embolus
- stroke (rare)
- embolus in other organs (rare)

Prevention

Anticoagulants may be prescribed as a preventive measure for high risk people.

Minimise immobility of the legs.

Deep venous thrombosis, ileofemoral



Deep venous thrombosis with phlebitis – foot





